

# **Governor's Advisory Commission on Intermodal Transportation**

**2017-2026 Draft Ten Year Plan Overview**

**1:00 pm, August 26, 2015**

**7<sup>th</sup> Settlement Restaurant**

**Dover, NH**

# Meeting Goals

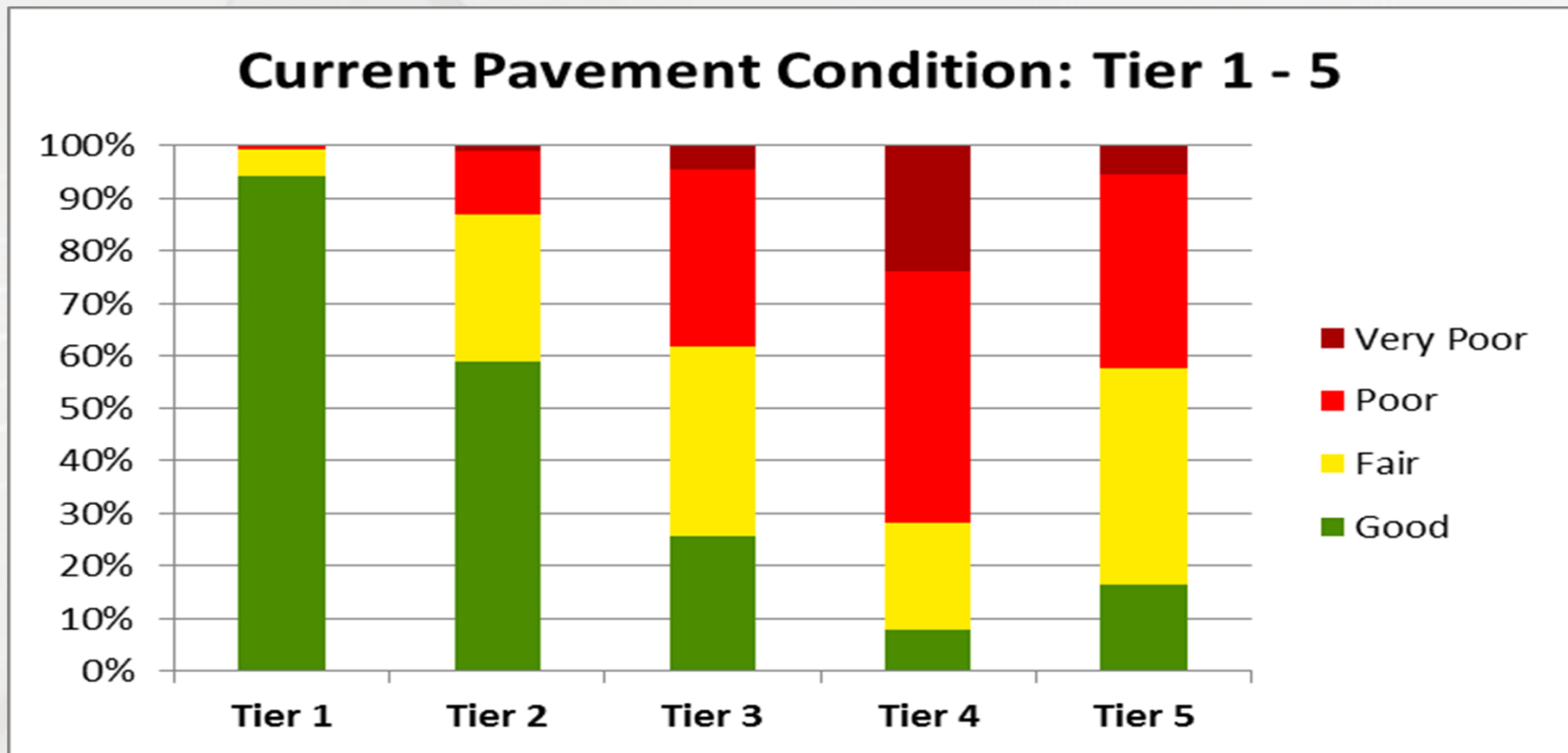
- Overview
- Ten Year Plan process
- State of Infrastructure Summary
- Proposed TYP highlights
- TIFIA Pledged Paving & Bridge Work
- Unfunded Needs
- Ten Year Plan Schedule

# Ten Year Plan Process

- **April 2015 - Community outreach and regional prioritization by RPCs**
- **July 22<sup>nd</sup> – GACIT 2017-2026 TYP Kickoff meeting**
- **August 4<sup>th</sup> thru 18th – Meetings with RPCs Executive Directors**
- **August 26, 2015 - NHDOT Draft TYP (2017-2026) Document Release**
- September – October 2015 – 16 Public Hearings
- November 2015 – GACIT meetings & revisions
- December 2015 - Governor's review & revisions
- January 15, 2016 - Governor's Draft TYP transmittal to Legislature
- January - May 2016 - Legislative review & revisions
- June 2016 – Final TYP (2017-2026) Adopted into Law

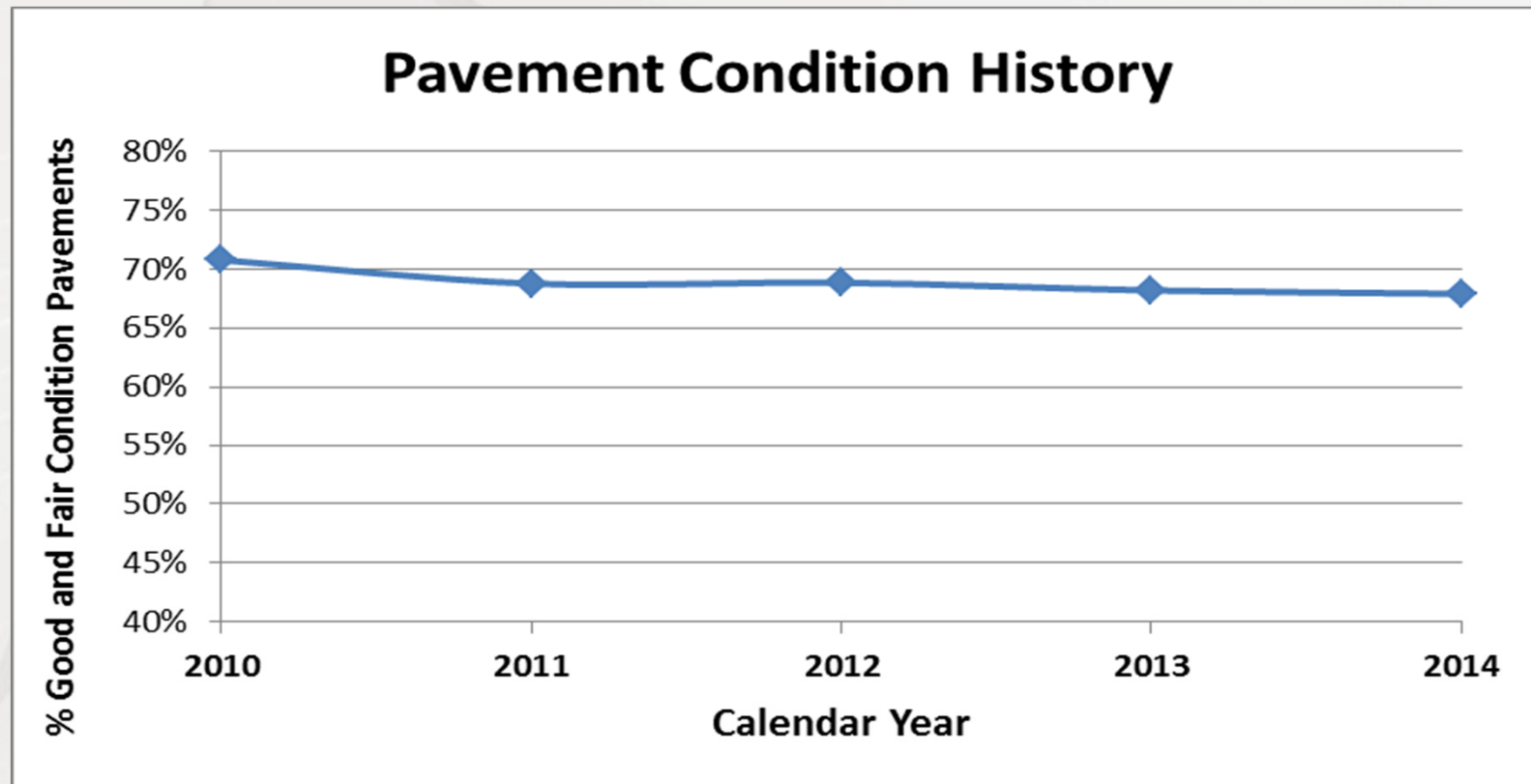
TYP Process - Pursuant to RSA 228:99 & RSA 240

# Current State of Infrastructure



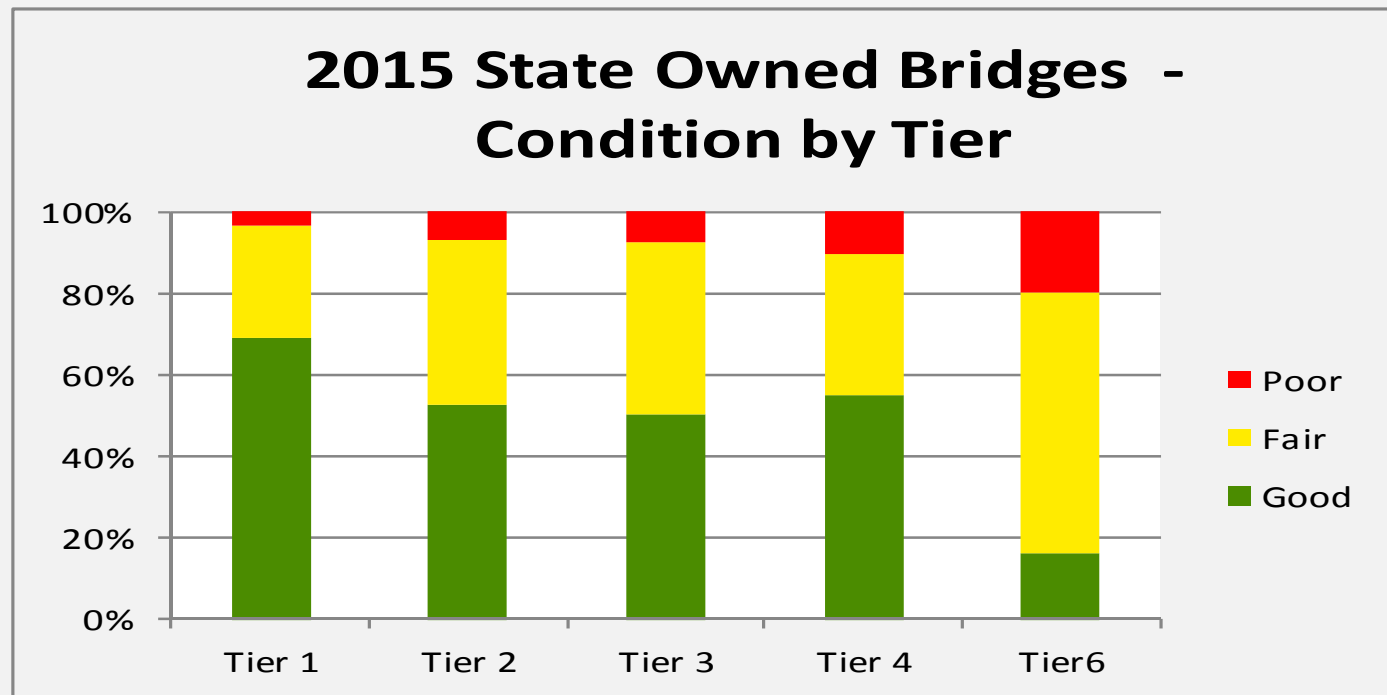
- Tiers 1 & 2 – 91% of roads are in good or fair condition
- Tiers 3 & 4 – 49% of roads are in good or fair condition
- Overall, 68% of NH's roads (state & municipal) are good/fair  
Conversely, 32% (1,345 miles) are poor/very poor condition

# Current State of Infrastructure (con't)



- Overall % of Good & Fair Roads has dropped over last five years (2010 – 2014)
- Level of investment has not kept pace with level of pavement deterioration

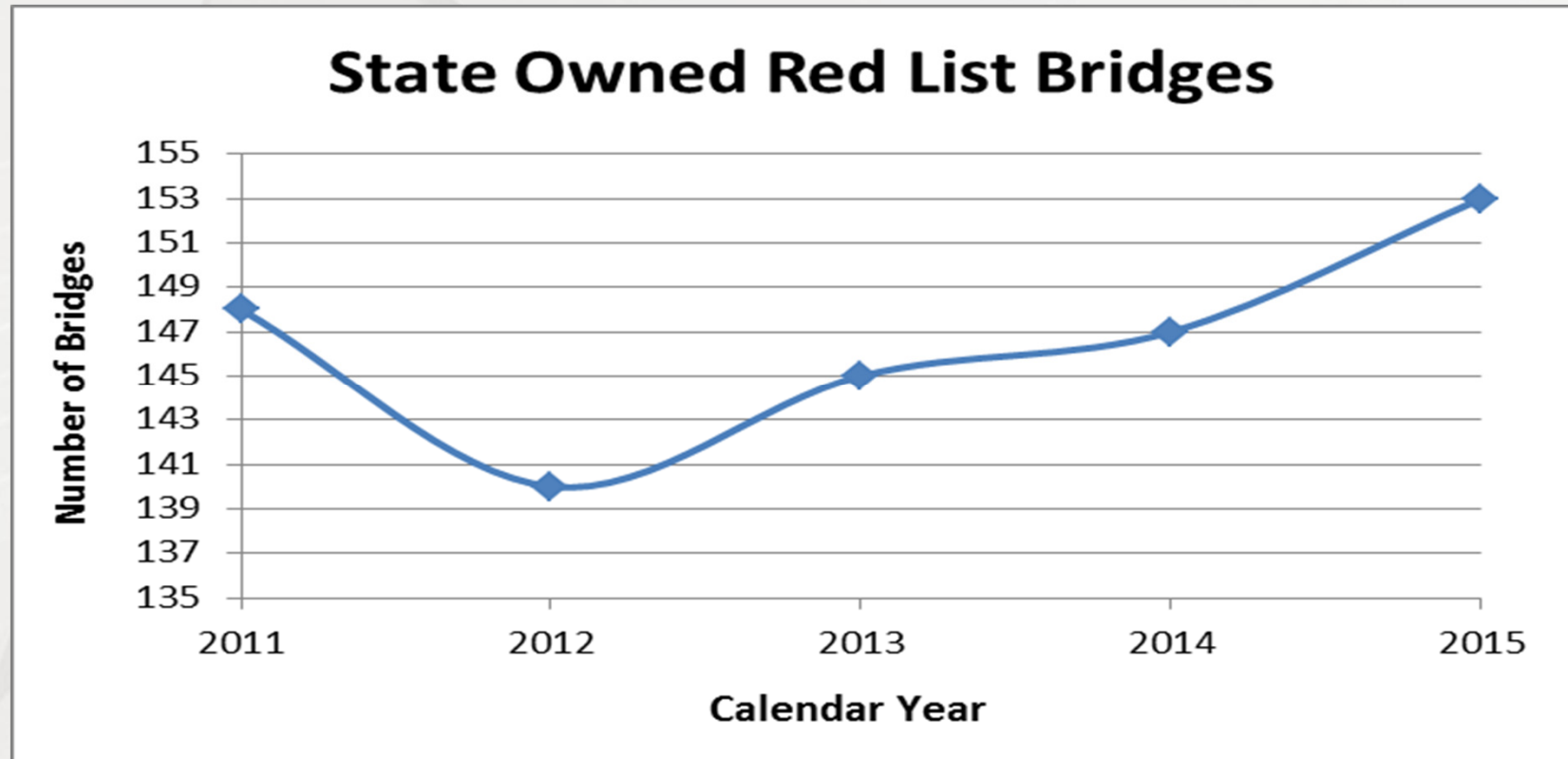
# Current State of Infrastructure (con't)



Red List Bridges	19	42	38	44	10
------------------	----	----	----	----	----

- Presently (2015) - 153 State Red-List Bridges
- Tiers 1 & 2 – 5.3% (61 bridges) in poor condition (red list)
- Tiers 3 & 4 – 8.7% (82 bridges) in poor condition (red list)
- Additionally 344 Municipal Red-List Bridges (2015)

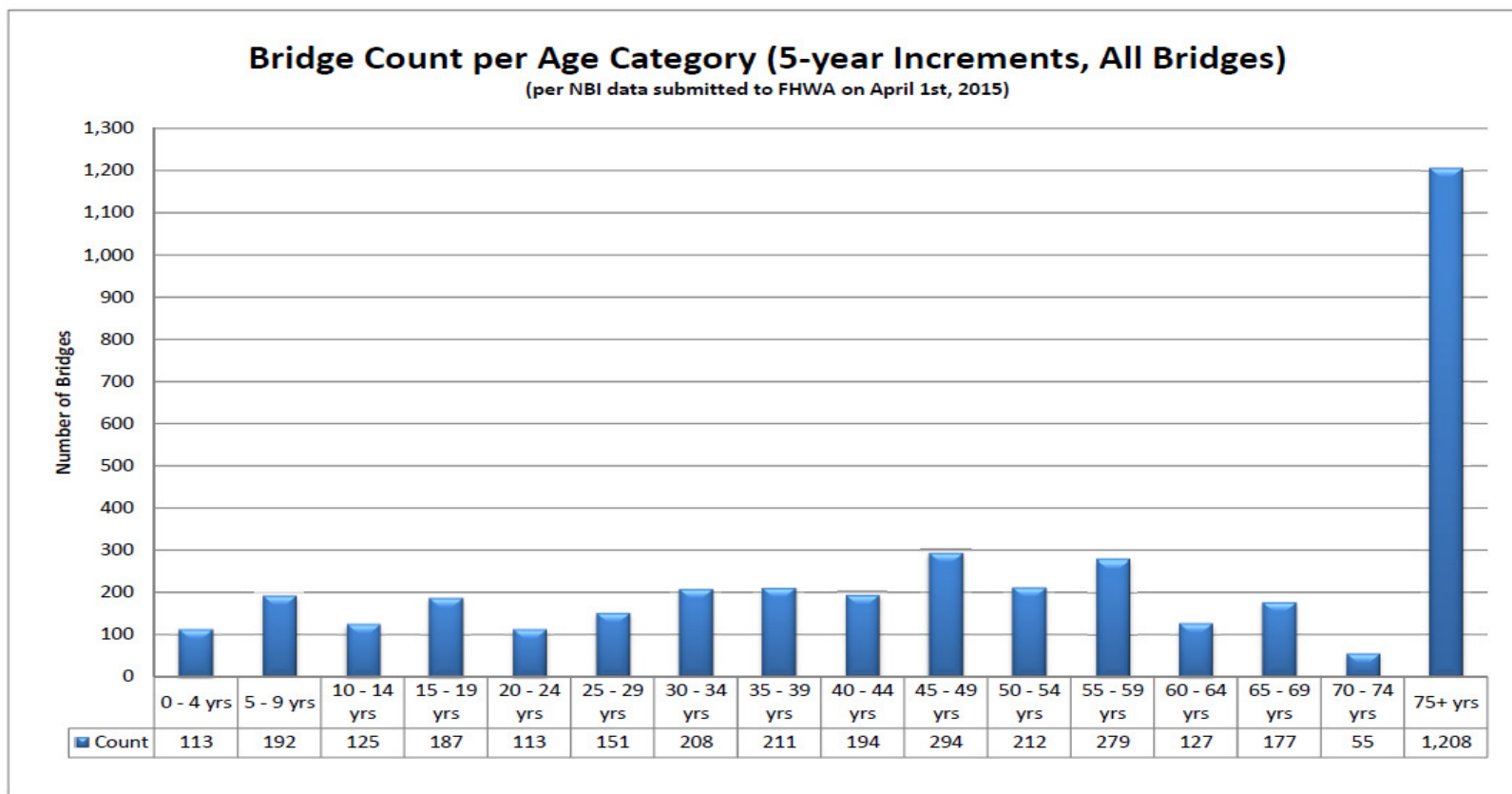
# Current State of Infrastructure (con't)



- The number state owned redlist bridges (poor condition) has trended upward over the last 3 years.
- Over the last 5 years, on average 23 bridges per year added to redlist with 21 bridges per year removed from the redlist
- Today (2015), 7% of the State's bridge or 153 are in poor condition.



# Current State of Infrastructure (con't)



- Of the 3,846 State & Municipal Bridges, 1,208 are 75 years or older
- Major Loaming Liability if we do not invest in bridge maintenance and preservation efforts.



# Approved TYP (2015 – 2024) Funding

2015-2024 Ten Year Plan

Total Program Dollars by FY - Includes Revenue from SB 367

	Highway and Bridge							Other Modes						
	Highway Funded													
FY	FHWA <sup>1,4,5</sup>	Betterment <sup>2</sup>	State Aid Bridge <sup>2</sup>	State Aid Highway <sup>2</sup>	SB367 Road Toll <sup>10</sup>	Other Matching Funds <sup>3</sup>	Subtotal	Turnpike Improvements <sup>6</sup>	Turnpike Renewal & Replacement	Rail <sup>5</sup>	Transit <sup>6</sup>	Airport <sup>7</sup>	TYP FY Total	% of Total Program
2015	171.4	22.0	7.5	2.9	35.5	24.5	263.9	54.8	7.7	0.8	24.6	25.7	377.5	11.0%
2016	167.3	22.0	3.5	3.4	31.1	26.4	253.7	37.7	11.6	0.4	23.9	35.9	363.3	10.6%
2017	187.7	22.0	7.5	4.3	31.0	24.2	276.7	27.0	11.5	0.4	23.3	46.3	385.2	11.2%
2018	186.7	22.0	8.7	2.5	30.9	9.9	260.7	19.1	13.7	0.4	25.5	42.3	361.6	10.5%
2019	187.4	22.0	10.8	2.5	30.9	5.9	259.6	30.1	13.8	0.4	23.8	44.3	372.0	10.8%
2020	191.6	22.0	13.5	2.5	30.8	1.1	261.5	41.8	12.0	0.4	23.3	0.0	339.0	9.9%
2021	189.7	22.0	8.4	2.5	30.7	0.0	253.4	18.9	12.0	0.4	23.7	0.0	308.4	9.0%
2022	191.9	22.0	13.1	2.5	30.6	9.0	269.0	22.9	12.0	0.4	24.1	0.0	328.4	9.5%
2023	181.3	22.0	8.2	2.5	30.5	0.0	244.5	24.0	12.0	0.4	22.6	0.0	303.5	8.8%
2024	179.8	22.0	9.6	2.5	30.4	0.0	244.4	21.0	12.0	0.4	23.9	0.0	301.7	8.8%
Program Total	1,834.7	220.0	90.9	28.4	312.1	101.2	2,587.3	297.3	118.2	4.4	238.6	194.6	3,440.5	100.0%
% of Total Program	53.3%	6.4%	2.6%	0.8%	9.1%	2.9%		8.6%	3.4%	0.1%	6.9%	5.7%	100.0%	
	1,539.6	220.0	110.0		312.1	101.2								
Revenue <sup>7,9</sup>	2,282.9								297.3	118.2	4.4	238.6	200.0	3,141.5
	(295.1)	0.0	(9.3)		(0.0)	0.0								
Surplus/Deficit	(304.4)								0.0	0.0	0.0	0.0	5.4	(299.0)

- Approved TYP (2015 -2024) contained \$3.44B in programmed projects against estimated revenue of \$3.14B. The Plan was over-programmed by \$300M.
- Primarily the Plan was over-programmed on the federal side (FHWA) using an average of \$183M/year against anticipated revenue of \$154M/year.

# **Approved TYP (2015 – 2024) Status**

- **Nearly all projects from the current approved TYP (2015-2024) are being carried forward or have been executed (see Supplemental Information for listing, p. 13)**
  - 14 projects were advanced to 2015/2016 and have been executed or will be executed
  - 7 projects have been withdrawn or canceled and are not carried forward
- **Status of FY2015 & FY2016 Projects (Construction) in approved TYP (2015-2024) (see Supplemental Information for listing, p. 12)**
  - Of the 44 Projects, 29 projects have construction underway or have advertised with the remaining 15 planned to advertise in 2016.

# Proposed draft TYP Highlights

1. Focus on Pavement Preservation
  - “Keeping good roads good”
  - Maintenance and Preservation strategies on existing system
2. Focus on Red List Bridges & Bridge Preservation
  - Increased funding to address State’s Red List Bridge backlog
  - Increased funding for bridge preservation work to extend bridge life
3. Dedicated TIFIA pledged funds for rural roads & bridges
  - Funding allocated for paving poor & very poor (1160 miles) Tier 3 & 4 roads
  - Funding allocated for 18 Red List Bridges
4. Completion of I-93 & Funding for Exit 4A
5. Heightened Financial Constraint
  - Assumed level federal funding
  - Limited over-programming (federal program over-programmed by 6%)
  - Increased level of accountability, predictability & ability to deliver

# Proposed TYP Funding Synopsis

## Typical Annual Funding Utilization

### **Federal Funding typically \$155M/yr - \$160M/yr**

- Preservation & Maintenance (Roads & Bridges): \$80M - \$85M
- Mandated Federal (CMAQ, TA, SPR, HSIP, LTAP, etc): \$24M
- I-93 GARVEE Debt Service: \$16M - \$18M

### **Annual Dedicated Funding: \$120M - \$125M**

- Individual Projects (remainder of federal funding): \$35M - \$40M

### **Betterment Funding typically \$22M/yr**

- Preservation & Maintenance (Roads & Bridges): \$22M

### **Turnpike Funding for Capital & TRR ranges \$30M - \$60M/yr**

- TRR- Preservation & Maintenance (Roads & Bridges): \$10M - \$12M
- Turnpike Capital Improvements: \$20M - \$45M

# **Proposed TYP Funding Synopsis (con't)**

## **SB367 Funding for I-93 Expansion, SAB, Potential TIFIA**

- \$30M per year net of Municipal Block Grant Aid
- State Aid Bridge: \$6.8M/year
- I-93 Debt Service: Averages \$2.0M/year (first 8 yrs)
- TIFIA Pledged Paving & Bridge Work: \$12M/year (paving)  
\$ 8M/year (bridges)

**Transit Funding (FTA) averages \$33M/yr**

**Airport Funding (FAA): averages \$26M/yr**



# General Financial Constraint Considerations for draft TYP (2017 – 2026)

- **Formula Federal Funds Programmed at average \$170M/year**
  - CMAQ and HSIP programs are funded at 50% & 75% levels respectively, with balance transferred to 'flexible' categories for other projects/programs to help address pavement and bridge priorities (approx. \$7M/year)
  - Other mandated federal programs remain 100% funded (TA, Off-system bridge, etc.)
  - Some existing projects needed to be delayed/cash-flowed to help achieve constraint by year
  - Includes approximately \$47M for additional Individual RPC projects in 2025/2026
  - Funds \$50M for I-93 Exit 4A (ROW acquisition & Construction beginning in 2022)
  - Provides additional \$35M for bridge maintenance & preservation over ten-year period
  - Provides additional \$10M for statewide culvert replacements

# **General Financial Constraint Considerations for draft TYP (2017 – 2026)**

- **Turnpike Capital and R&R Programs**

- Turnpike Capital Work averages \$35M/year with two unfunded priority projects starting construction in 2024 & third unfunded priority project starting construction in 2026.
- Turnpike Renewal & Rehabilitation (TRR) program averages \$11M/year for paving, bridge, & other preservation/maintenance work

- **Other Programs**

- Betterment funded at traditional levels
- Aeronautics funded at traditional levels
- Transit funding increased due to anticipated increase in FTA grants



# Draft TYP (2017 – 2026) Funding

## Draft 2017-2026 Ten Year Plan Total Program Dollars by FY

	Highway and Bridge											Other Modes				
	Highway Funded									Non-Highway Funded						
FY	FHWA <sup>1,4,5</sup>	TIFIA Financing I-93	Betterment <sup>2</sup>	SB367			SAH <sup>2</sup>	Other <sup>3</sup> Matching Funds	Sub Total	Turnpike <sup>7</sup> Improvement	Turnpike R&R	Rail <sup>5</sup>	Transit <sup>6</sup>	Airport	TYP FY Total	% of Total Program
				SAB <sup>2</sup>	I-93 Debt Service	TIFIA Pledged Paving & Bridge										
2017	176.67	53.74	21.10	9.36	0.89	15.20	3.89	15.86	296.70	29.76	9.85	0.60	29.72	31.32	397.95	11.1%
2018	169.39	52.85	21.10	9.05	1.44	20.68	2.50	8.77	285.78	28.47	11.75	0.60	29.99	29.59	386.18	10.8%
2019	172.52	51.12	21.10	8.85	2.00	20.49	2.90	6.76	285.74	21.70	11.90	2.10	29.43	26.06	376.93	10.5%
2020	174.31	15.60	21.47	9.72	2.27	20.70	2.86	6.66	253.60	31.51	10.40	0.60	31.55	67.60	395.26	11.0%
2021	174.11	0.00	21.47	9.26	2.26	21.05	2.50	1.54	232.20	36.57	10.60	0.60	31.84	18.55	330.36	9.2%
2022	171.14	0.00	21.47	10.49	2.26	20.14	2.50	11.77	239.78	36.10	10.80	2.10	32.98	22.24	343.99	9.6%
2023	175.01	0.00	21.47	9.55	2.26	19.04	2.50	3.96	233.79	28.00	11.00	0.60	34.16	11.80	319.35	8.9%
2024	169.41	0.00	21.47	9.93	2.27	19.89	2.50	3.72	229.19	44.50	11.30	0.60	35.38	21.14	342.12	9.5%
2025	179.86	0.00	21.10	9.95	21.25	0.00	2.50	1.12	235.78	35.90	11.50	2.10	36.65	11.83	333.76	9.3%
2026	176.54	0.00	21.10	9.79	21.25	0.00	2.50	0.05	231.22	57.50	11.70	0.60	37.97	20.66	359.66	10.0%
Program Total	1,738.94	173.30	212.87	95.96	58.16	157.19	27.15	60.21	2,523.77	350.01	110.80	10.50	329.67	260.80	3,585.56	100.0%
% of Total Program	68.9%	6.9%	8.4%	3.8%	2.3%	6.2%	1.1%	2.4%	100.0%							

Revenue <sup>9</sup>	1632.14	173.30	220.00	280.54	27.15	60.21										
	2393.34									350.01	110.80	10.50	329.67	260.80	3585.56	
Surplus/Deficit	-106.80	0.00	7.13	-30.76	0.00	0.00				0.00	0.00	0.00	0.00	0.00	-130.44	
	-130.44									0.00	0.00	0.00	0.00	0.00	-130.44	

## • FY17-FY26 Estimated Program Expenditures

- Federal Funded (Formula, Earmarks, Other) - \$170M to \$180M per year
- Highway Funded (state & federal) - \$230M to \$295M per year
- Turnpike Funded – Average \$46M per year for TRR & Tpk Capital
- Other Modes - Average \$60M per year
- Over-Programmed by \$130M over 10-year period or 3.6%

# Draft TYP (2017 – 2026) Funding

Ten Year Plan  
Total Program Dollar Comparison

Average Year over (10 years)	Highway and Bridge												Other Modes			TYP FY Total
	Highway Funded								Non-Highway Funded							
	FHWA	TIFIA Financing I-93	BET	SB367			SAH	Other Matching Funds	Sub Total	Turnpike Improvement	Turnpike R&R	Rail	Transit	Airport		
SAB				I-93 Debt Service	TIFIA Pledged Paving & Bridge											
15-24 TYP	183.4	0.0	22.0	16.0	24.4		2.8	10.1	258.7	29.7	11.8	0.4	23.9	19.5	344.0	
17-26 TYP	173.9	17.3	21.3	9.6	73.9		2.7	6.0	252.4	35.0	11.1	1.1	33.0	26.1	358.6	

~ Dollars include indirect costs and inflation (3.2%)

Dollars in Millions

Aug-25-15

- **FY17-FY26 Estimated Program Expenditures**
  - Highway Funded (state & federal) - \$230M +/- per year
  - Turnpike Funded – Averages \$45M per year for TRR & Tpk Capital
  - Other Modes - Averages \$70M per year

# Draft TYP (2017 – 2026) Funding

Draft 2017-2026 Ten Year Plan											
All Funding											
FISCAL YEAR	PAVEMENT	BRIDGES	I-93 EXPANSION	MANDATED FEDERAL	INDIVIDUAL PROJECTS	ROADSIDE	RAIL	TRANSIT	AIRPORTS	DEBT SERVICE	GRAND TOTAL
2017	75.34	85.81	64.21	25.85	58.46	8.49	0.60	29.26	31.32	18.62	397.95
2018	78.46	94.79	58.64	26.96	40.19	8.49	0.60	29.29	29.59	19.17	386.18
2019	73.12	99.19	54.85	26.10	38.62	8.49	2.10	28.65	26.06	19.73	376.93
2020	73.03	106.90	18.60	25.48	43.81	8.49	0.60	30.75	67.60	20.00	395.26
2021	78.47	107.61	1.45	25.48	39.13	8.49	0.60	31.84	18.55	18.74	330.36
2022	75.69	81.73	5.16	26.02	70.85	8.49	2.10	32.98	22.24	18.73	343.99
2023	72.83	77.63	5.91	25.48	63.76	8.49	0.60	34.16	11.80	18.71	319.35
2024	73.19	40.55	15.67	25.48	102.97	8.49	0.60	35.38	21.14	18.64	342.12
2025	70.92	48.39	10.35	25.48	81.94	8.49	2.10	36.65	11.83	37.62	333.76
2026	71.57	60.43	15.00	25.48	98.21	8.49	0.60	37.97	20.66	21.25	359.66
<b>Total</b>	<b>742.61</b>	<b>803.02</b>	<b>249.84</b>	<b>257.82</b>	<b>637.95</b>	<b>84.85</b>	<b>10.50</b>	<b>326.95</b>	<b>260.80</b>	<b>211.22</b>	<b>3585.56</b>
% Grand Total	20.7%	22.4%	7.0%	7.2%	17.8%	2.4%	0.3%	9.1%	7.3%	5.9%	100.0%

~ Dollars include indirect costs and inflation (3.2%)

Aug-25-15

- FY17-FY26 Estimated Program Expenditures**

- Pavement (state & federal) – averages \$74M per year
- Bridges (state & federal) – averages \$80M per year (SLB early impact)
- I-93 Expansion - \$250M over ten-year period
- Mandate Federal – averages \$26M per year
- Individual Projects- \$640M over ten-year period
- Transit & Airports - \$590M over ten-year period
- Total Program - \$3.58B

# **General Projected Outputs of Draft TYP (2017-2026)**

- **Pavement Resurfacing 350 mi/year (estimated)**

- Preservation 150 mi/year
- Rehabilitate 16 mi/year
- Maintenance 185 mi/year

## **TIFIA Pledged Pavement Resurfacing**

- Additional 200 mi/year (estimated)
- Maintenance & Roughness Paving on Poor & V. Poor Roads

- **State-Owned Bridges**

- Rehabilitate / Replace: 118 bridges (51 Red list Bridges)
- Bridge Maintenance (38 Red list Bridges over 4-year period)

## **TIFIA Pledged Bridge Work**

- Rehabilitates / Replaces  
Additional 18 red list bridges

# TIFIA Program, Status & Impact

- “Transportation Infrastructure Finance and Innovation Act”
- NHDOT submitted a Letter of Interest to USDOT/FHWA in January 2015
- Awarded Rural Rate of Finance May 2015
- Enables NH to finance \$200M remainder of I-93; pave 40 percent of NH rural roads and fix 18 red list bridges while costing NH \$20M less than financing \$200M for I-93 alone through capital markets
- Financial close anticipated December 2015

# TIFIA Program, Status & Impact

SB 367			
Fiscal Year	State Aid for Municipal Bridges	Debt Service & Cost of Issuing Bonds Due on \$200M TIFIA Financing <sup>2</sup> for I-93	TIFIA Pledged Paving and Bridge Repair
2017	\$6,800,000	\$888,337	\$14,306,350
2018	\$6,800,000	\$1,439,465	\$20,816,999
2019	\$6,800,000	\$2,004,465	\$20,304,342
2020	\$6,800,000	\$2,267,639	\$19,956,752
2021	\$6,800,000	\$2,261,401	\$19,878,820
2022	\$6,800,000	\$2,264,520	\$19,791,774
2023	\$6,800,000	\$2,264,520	\$19,708,091
2024	\$6,800,000	\$2,267,639	\$19,621,531
2025	\$6,800,000	\$21,250,275	-
2026	\$6,800,000	\$21,250,275	-



# Unfunded Needs

- **Turnpike Capital Program**

- 325M in Unfunded Turnpike Capital Improvement Priorities Identified in approved TYP (2015-2024)
- \$125M in Construction Funding for three unfunded priorities proposed in 2024-2026
- \$210M in Unfunded Capital Improvement Priorities remains Unfunded
- \$2.5M annual program for Type II Noise Wall Program is needed & not funded

- **Red List Bridge Backlog**

- Currently 153 state red list bridges
- Based on Proposed Investment Level – Estimated to address 118 Bridges
- However, 1208 State-Owned Bridges are 75+ years old
- Over last 5 years, 23 red list bridges added each year (21 removed each year)

- **Municipal Red List Bridge Backlog**

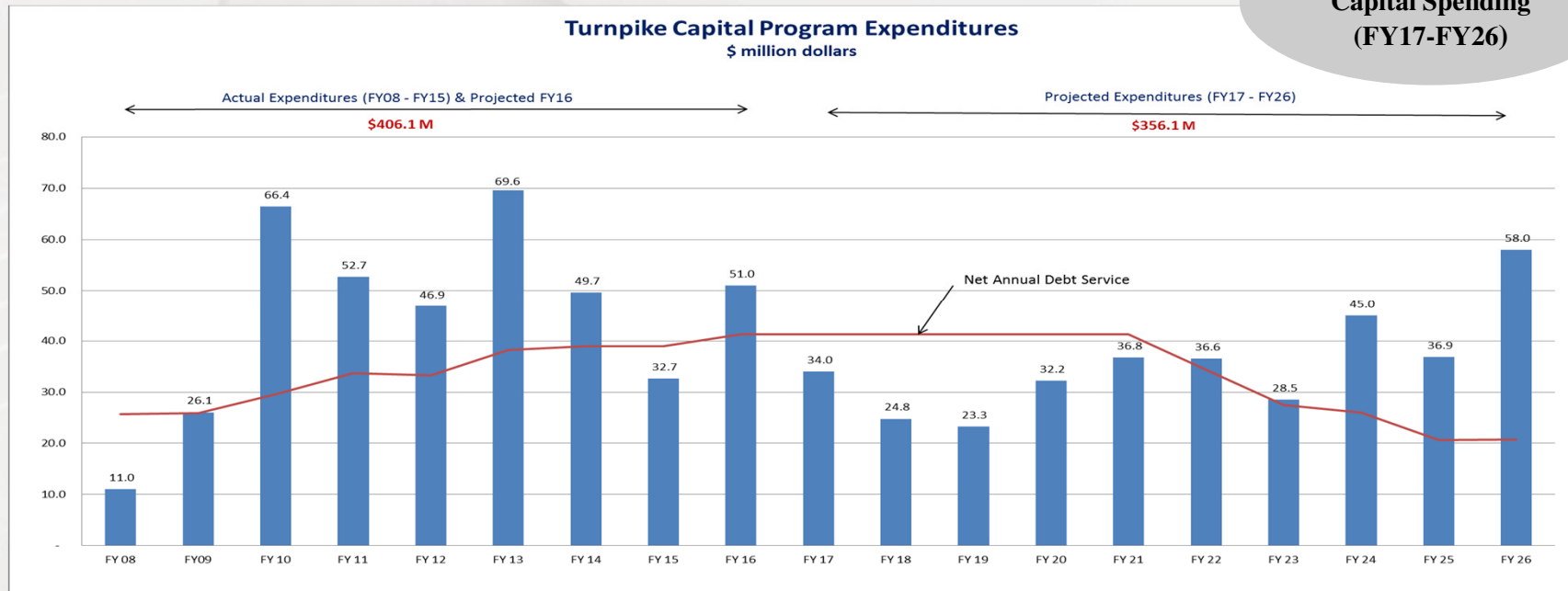
- Currently 344 municipal red list bridges
- Based on Currently Proposed SAB Investment Level – Estimated to address 90 Bridges



# Turnpike System Capital Program

## Under Current Toll Structure

**\$356M Projected  
Capital Spending  
(FY17-FY26)**

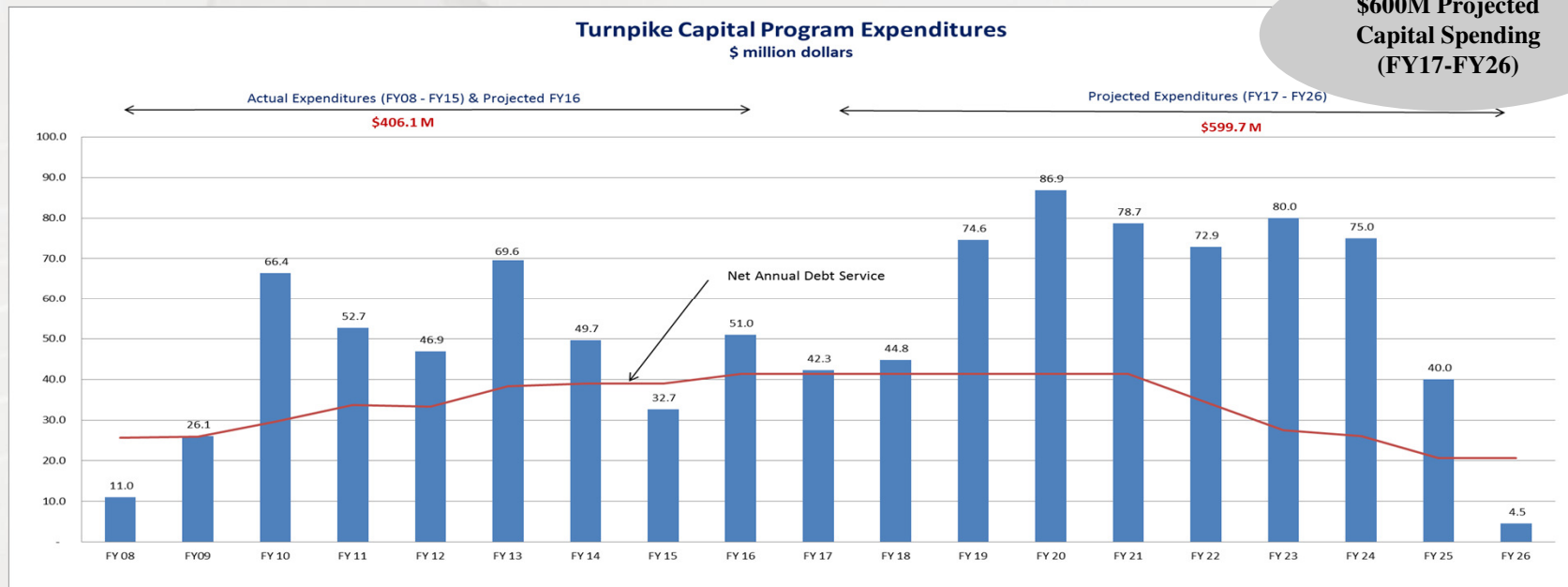


## **TIMETABLE FOR MAJOR TURNPIKE PROJECTS' CONSTRUCTION**

- Construction Dover End & GSB Rehabilitation (\$85M): **2017 - 2021**
- Construction of FEET Widening , Merrimack-Bedford (\$70M): **2022 - 2024**
- Manchester Exit 6 Improvements & FEET Widening (\$75M): **2024 - 2027**
- Manchester Exit 7 Reconstruction (\$54M): **2026 - 2028**
- Bow-Concord: I-93 Widening (I-89 to I-393) (\$190M): **2027 - 2032**

# Turnpike System Capital Program

## Under New Toll Structure (28% Toll Increase)



## TIMETABLE FOR MAJOR TURNPIKE PROJECTS' CONSTRUCTION

- Construction Dover End & GSB Rehabilitation (\$85M): **2017 - 2021**
- Construction of FEET Widening , Merrimack-Bedford (\$70M): **2019 - 2021**
- Manchester Exit 6 Improvements & FEET Widening (\$75M): **2021 - 2024**
- Manchester Exit 7 Reconstruction (\$54M): **2022 - 2024**
- Bow-Concord: I-93 Widening (I-89 to I-393) (\$190M): **2020 – 2025**
- **\$2.5M Annual Funding for Type II Soundwall Program**

# Turnpike System Capital Program

## Under New Toll Structure (28% Toll Increase)

- Hooksett ML & Bedford ML Plazas: 50 cent increase (\$1.00 toll to \$1.50 toll)
- Hampton ML Plaza: 50 cent increase (\$2.00 toll to \$2.50 toll)
- Hampton Side Plaza: 25 cent increase (\$0.75 toll to \$1.00 toll)
- Dover & Rochester ML Plazas: 25 cent increase (\$0.75 toll to \$1.00 toll)
- Hooksett Ramp Plaza: 25 cent increase (\$0.50 toll to \$0.75 toll)
- **\$35M additional annual toll revenue per year**

- **No Additional Bonding Proposed**

Toll Increase is paid by users of the system

- Users directly benefit from the capital investment
- **\$15.9M/Year or 45%** of additional revenue is from out-of-state travelers

# Unfunded Needs (con't)

- **Bridge Investment**

- Additional investment of **\$12M/year** needed over 10-year period for Tier 1 & 2 bridge preservation needs
- Additional investment of **\$21M/year** needed to address additional 10 red list bridges per year (bridges that are anticipated to be added to red list but not addressed during this TYP period)
- Additional investment of **\$22.5M/year** to SAB Program – Estimated to address 250 municipal bridges over 10-year period

- **Pavement Investment**

- Additional investment of **\$11.5M/year** needed over 10-year period to rehabilitate poor and very poor Tier 2, 3 & 4 roads
- Additional investment of **\$3M/year** needed over 10-year period, effectively doubling the maintenance pave program, to maintain pavement condition of poor and very poor roads in fair condition

# Upcoming TYP Meetings

- **Ten Year Plan Public Hearings begin Sept 15<sup>th</sup> thru Oct 26<sup>th</sup>**
- **16 Public Hearings are planned**
- **Council District 1:** Lebanon, Berlin, Charlestown (co-hosted), Conway, Wakefield, Plymouth, Laconia
- **Council District 2:** Rochester, Keene (co-hosted), Charlestown (co-hosted), Concord (co-hosted)
- **Council District 3:** Hampton, Kingston, Londonderry (co-hosted)
- **Council District 4:** Bedford (co-hosted), Manchester, Londonderry (co-hosted)
- **Council District 5:** Keene (co-hosted), Bedford (co-hosted), Merrimack

**THANK YOU**

**QUESTIONS & COMMENTS**